

COMMONWEALTH OF MASSACHUSETTS

HAMPDEN, SS

SUPERIOR COURT DEPARTMENT
OF THE TRIAL COURT
NO. [REDACTED]

COMMONWEALTH

v.
[REDACTED]

AFFIDAVIT OF JAMES L. HANCHETT

1. I, James L. Hanchett, do hereby depose and state the following:
2. I am employed as a chemist at the Department of Public Health, State Laboratory Institute, Drug Analysis Laboratory, located at the Western Massachusetts Public Health Center in Amherst, Massachusetts.
3. My duties include supervising the drug analysis laboratory and testing evidence submitted by law enforcement agencies in Massachusetts to determine the presence or absence of controlled substances and technically reviewing completed case work files of other Drug Unit analysts.
4. I have a Bachelor of Science degree in chemistry. See Exhibit A. Curriculum Vitae.
5. I have completed a documented training program. The training program included examinations; analysis of unknown materials and known standards; and verification testing of my competency. My training also included utilization and familiarization of all protocols used to examine drug cases submitted to the laboratory.
6. I am familiar with the Recommendations of the Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG). SWGDRUG is comprised of a committee of prominent forensic scientists from around the world. SWGDRUG recommends the minimum standards to be met for the forensic identification of commonly seized drugs.

7. The protocols in place at the Drug Analysis Laboratory meet or exceed all SWGDRUG recommendations.
8. After individual cases involving substances that are believed to be cocaine are processed, the Drug Analysis Laboratory supervisors then assign the cases to a Drug Unit analyst. When the analyst is ready to test the submission, she makes a visual observation of the substance to ensure that the evidence seal is intact and that the substance has not been tampered with. The sample is re-weighed in accordance with protocol. She then unseals the bag(s) and begins testing the submitted substance.
9. The analyst conducts one or more of the following tests on the submitted evidence: mass spectrometry, infrared spectroscopy, gas chromatography, and ultra violet spectroscopy. Color tests may also be conducted. The data generated by the tests is then printed out and must be interpreted by the drug analyst.
10. After all the tests are concluded, the analyst who conducted the test(s) interprets the test results and reaches an opinion as to the composition of the substance. The opinion is included in a "report," which is then formally prepared in the form of a "certificate of analysis." At this point, the testing is complete. The file includes the inventory forms, the analyst's notes, all the underlying data printouts from the various tests and the certificate of analysis.
11. All completed case work files must be technically reviewed by a qualified technical reviewer prior to the release of a certificate of analysis. I am qualified to perform technical reviews on completed case work files in the Drug Unit. Technical review of case work files is an essential component of the Crime Laboratory's quality assurance program and is an accreditation requirement of the American Society of Crime Laboratory Directors Laboratory Accreditation Board, ASCLD-LAB. The Drug Unit as well as the entire Forensic Services Group is accredited by ASCLD-LAB Legacy program.
12. A technical reviewer is required to have sufficient expertise gained through training and experiences in the discipline of drug analysis. Technical review requires the individual to review all items in the case work file including all data printouts generated by the testing completed in Category A, B and C of SWGS DRUG's recommendations.
13. As a technical reviewer, I can review any completed case work file from the Crime Laboratory Drug Unit and my training, knowledge and experience with drug testing will allow me to determine what methods were used, what tests were conducted and what type of substance(s) the testing identified. Thus, although I was not the analyst who performed the drug testing in the above referenced case, I can review the generated data printouts and determine what drug or drugs have been identified by

each testing method. As a technical reviewer, I do not need to consult the original analyst's certificate of analysis to make this determination. Instead, I am able to form my own opinion as to the composition of the substance(s) by reviewing the generated data printouts.

14. [[The following information would be case specific.]] I have reviewed the **Mass spectrometry**. The data printout indicates the presence of cocaine.
15. I have reviewed the **infrared spectrum**. The data printout indicates the presence of cocaine.
16. I have reviewed the **gas chromatograph**. The data printout indicates the presence of cocaine.
17. I have reviewed the **ultra violet spectrophotometry** data printout. The data printout indicates the presence of cocaine.

Signed under the pains and penalties of perjury this ____ day of _____.

James L. Hanchett
Laboratory Supervisor

EXHIBIT 1

EXHIBIT 2

EXHIBIT 2- SWGDRUG RECOMMENDATIONS

SWGDRUG recommends that laboratories adhere to the following minimum standards:

- 3.1 When a validated Category A technique is incorporated into an analytical scheme, at least one other technique (from either Category A, B or C) shall be used.
- 3.2 When a Category A technique is not used, at least three different validated techniques shall be employed. Two of the three techniques shall be based on uncorrelated techniques from Category B.
 - 3.2.1 For cannabis, macroscopic and microscopic examinations will be considered as uncorrelated techniques from Category B when observations include documented details of botanical features.
 - 3.2.2 For exhibits of cannabis that lack sufficient observable macroscopic and microscopic botanical detail (e.g. extracts or residues), Δ^9 -tetrahydrocannabinol (THC) or other cannabinoids shall be identified utilizing the principles set forth in sections 3.1 and 3.2.

CATEGORY A	CATEGORY B	CATEGORY C
Infrared Spectroscopy	Capillary Electrophoresis	Color Tests
Mass Spectrometry	Gas Chromatography	Fluorescence Spectroscopy
Nuclear Magnetic Resonance Spectroscopy	Ion Mobility Spectrometry	Immunoassay
Raman Spectroscopy	Liquid Chromatography	Melting Point
X-ray Diffractometry	Microcrystalline Tests	Ultraviolet Spectroscopy
	Pharmaceutical Identifiers	
	Thin Layer Chromatography	
	Cannabis only: Macroscopic Examination Microscopic Examination	

Source: <http://www.swgdrug.org/Documents/>

EXHIBIT 3

**EXHIBIT C- MSP DRUG UNIT'S COMPLIANCE WITH SWGDRUG
RECOMMENDATIONS**

DRUG	CATEGORY A	CATEGORY B	CATEGORY C
Cocaine	Mass Spectrometry Infrared Spectroscopy	Gas Chromatography	Color Tests or Ultraviolet Spectroscopy
Heroin	Mass Spectrometry Infrared Spectroscopy	Gas Chromatography	Color Tests or Ultraviolet Spectroscopy
LSD	Mass Spectrometry	Gas Chromatography	Color Tests or Ultraviolet Spectroscopy
Mushrooms	Mass Spectrometry	Liquid Chromatography	Color Tests or Ultraviolet Spectroscopy
Powders/Liquids	Mass Spectrometry Infrared Spectroscopy	Gas Chromatography	Color Tests or Ultraviolet Spectroscopy
Isobutyl Nitrite/Butyl Nitrite	Infrared Spectroscopy		Ultraviolet Spectroscopy
Powder or other Residues	Mass Spectrometry Infrared Spectroscopy	Gas Chromatography	Color Tests or Ultraviolet Spectroscopy
Resinous Matter	Mass Spectrometry	Gas Chromatography	Color Tests
Methamphetamine	Mass Spectrometry Infrared Spectroscopy	Gas Chromatography	Color Tests or Ultraviolet Spectroscopy
Marihuana	Mass Spectrometry	Gas Chromatography Macroscopic Examination Microscopic Examination	Color Tests
Tablets and capsules	Mass Spectrometry Infrared Spectroscopy	Gas Chromatography	Ultraviolet Spectroscopy

EXHIBIT 4